VIRTUAL UNIVERSITY OF PAKISTAN

Classroom Assessment

EDU405

Course Handouts

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Topic 1

"The Concept of Assessment and its Applications to Teaching and Learning"

Purpose and basic terms:

1. **Purpose:** To judge some process or product with the aim of making improvements. Here the purpose is to judge teaching and learning so that improvements can be made for future.

2. **Basic terms:**

   i. **Measurement:** refers to dimensions/quality/weight. For example, measuring a box, weighing it.
   ii. **Testing:** Process of judging something. For example, testing your ability, testing blood sample.
   iii. **Assessment:** is a broader term and includes measurement and testing also; it is usually with reference to some goals. For examples, your assessments, or of some organization.
   iv. **Evaluation:** is a complex process and more broader term including measurement and testing and assessment, engaging with some other processes of making comparisons; its results enable you to make decisions for changes. For example, change of course outline or materials.

Topic 2

What is Classroom Assessment?

Definition-1:

Assessment is the systematic collection, review, and use of information about educational programs undertaken for the purpose of improving student learning and development. (Palomba & Banta, 1999)

Definition-2:

Assessment is the **process of gathering** and discussing information from **multiple** and **diverse sources** in order to develop an understanding of what students know and understand; the process culminates when assessment results are used to **improve** subsequent learning. (Huba & Freed, 2000)



In short, the main points in these definitions are:

- Process of gathering information
- Multiple sources
- Develop and understand
- Improvement

Topic 3

Emerging points from these definitions:

1. Assessment is a systematic process: certain circumstances, goals and planning must be keep in mind while assessment. Nothing can take place haphazardly. See the image below:



3. **Information is gathered from different sources:**

There are many sources to get information about the students like homework, exam papers, class test, projects etc.

4. **Judgment:**

We gather all the information for judgment about what has yet achieved and what is still missing. Making such judgments is the essential part of process of improvement.

5. **About a process or product:**

Now this judgment is made for the assessment about a process or product. All the classroom activities and learning are a process and the knowledge gained by the students and a competent student is the product.

6. **Improvement:**

These judgments are made for improvement in the process and the product. Assessment is just like a bridge that is connecting behind as well as the future of the students.

Topic 4

Classroom Assessment: Classroom Context:

1. Information is gathered systematically: It is a systematic process, for example; a teacher teaches in a classroom and then at the end gives an assignment to the students as quiz, midterm exam and final term exam. Final term exam is never taken at the start of the academic session. So, a sequence is followed that is systematic.

2. From different sources to make improvements in teaching and learning: Assessment of students is done through a variety of ways like questioning in classroom, assignments, quizzes, exams etc. The information gathered from all the sources make your assessment.

3. To make improvements in teaching and learning: The results of assessment always open grounds of improvement.

4. To make changes in syllabi, curriculum or policies: All the results of assessment can be reviewed critically to make changes in the system for improving the teaching and learning process at policy making level.



Topic 5

Why Assessment is important?

a. Evaluation: Assessment gives us evaluation. Evaluation values our ability. A student can evaluate herself after exam that she could not perform well this time.

b. Motivation for students as well as for teachers:

c. Allocation of resources: books, materials, CDs etc. are all the resources, and through evaluation we come to know that the resources are utilized properly or there is a need for some change.

d. Modification and Improvement: It is a basic aim of every assessment and evaluation.

Topic 6

Challenges in Assessment:

Assessment is not an easy process. There are certain challenges that must be kept in mind while assessment. These are:

a. **Valid Assessment:** you are assessing what is intended to be assessed.
b. **Fair Assessment:** There should be no bias.
c. **Administrative issues:** like conducting exams or tests, proper arrangements in terms of time and infra structure.
d. **Meaningful interpretations of assessments and effective applications for future planning.**

Topic7

Basic assumptions about Classroom Assessment:

There are certain things which are assumed about classroom assessment.

a. **Teacher directed:** Teacher has a commanding role.
b. **Learner centered:** It revolves on the learner and learning.
c. **On going:** It is an ongoing process and seems to end, but in fact is going on.
d. **Mutually beneficial:** beneficial for both teacher and the learner.
e. **Context specific:** always according to certain context

Topic 8

Purpose: To judge some process or product with the aim of making improvements. Here the purpose is to judge teaching and learning so that improvements can be made for future.

Examples of process can be: conducting a test is a process; classroom also represents a process.

Examples of product assessment can be: products in market or a student is also a product after completing a degree.

Topic 9

Classroom Assessment: Measurement

Measurement: refers to dimensions/quantity/weight. Measurement is normally shown by using numbers. For example, measuring a box, or weighing it. Measurement is always with reference to some scale.

Topic 10

Classroom Assessment: Testing

Testing: refers to the process of judging some ability or deciding about some ability. For example, testing your ability for driving or in classroom; testing IQ.



Topic 11

Classroom Assessment: Assessment

Assessment: is a broader term and including measurement and testing also; it is usually with reference to some goals. For example, your assessments; like you have to learn hundred words by this weekend. So, your assessment will be related to those 100 words that how much and how firmly you have learnt them. Assessment is also related to organizations. All organizations assess their employees such as audit teams and inspection teams visits the organization.

Topic 12

Classroom Assessment: Evaluation

Evaluation: is a complex process and broader term including measurement, testing and assessment. All these things give you the value of the product/process that you are going to access. Evaluation also provides us with the ground for improvement.

Topic 13

Classroom Assessment: Modification or Improvements:

The basic purpose of every assessment is to make changes. There is no use of assessments if improvements are not made. The teacher develops a lesson plan to be followed in classroom; the lesson plan is then implemented in classroom. At the end there is evaluation of it. The purpose to evaluate it is modification/improvement.

Topic 14

Classroom Assessment: Types of Assessment:

There are different types of assessment; for example,

- You have midterm exams
- You have final term exams
- House exams and board exams

  Your classroom as a process

- Your result as a product

Names of these assessments are:

- Formative
- Summative
- External and internal
- Product
- Process

Topic 15

Classroom Assessment: Formative Assessment

Formative is a type of testing in which a range of formal and informal assessment procedures employed by teachers during the learning process in order to modify teaching and learning activities to improve student attainment.

Key points use for formative assessment:

- Range of formal and informal assessment
- During the learning process
- To modify teaching and learning
- To improve

Topic 16

Classroom Assessment: Summative Assessment

Summative assessment refers to the assessment of participants, and summarizes their development at the particular time. In contrast to formative assessment, the focus is on the outcome of the program.

Key points use for summative assessment:

- Assessment of participants
  Development at a particular time

- The outcome of a program

Topic 17

Classroom Assessment: External and Internal Assessment

Internal assessment is the process by which an organization assesses its policies and systems internally. It is carried out by the departments within the organization and employees themselves are skilled at managing internal assessment.

External assessment on the other hand involves an external organization or a consultancy firm to judge and monitor the organizational procedures and give an unbiased opinion for betterment.

Focus is on internal system vs external agencies. For instance your house exam and board exam.

Topic 18

Classroom Assessment: Process Assessment

Process assessment means the assessment of process taking place including the factors involved in it. 'During any process' is the key word. For example, classroom proceedings.

Topic 19

Classroom Assessment: Product Assessment

Product assessment means the assessment of product at the end of some process. Achievement at the end with reference to some goal is important here. For instance, your final grades.

Topic 20

Classroom Assessment: Some links and loops

Assessment is not an isolated concept, it is always linked to some other things as well.

What is a loop? A loop is defined as a process which is connected to its beginning. A system is said to perform closed-loop processing if the system feeds information back into itself.

Assessment is also done in a loop such as, a system that keeps informing the beginning means that some change is to be made there and then the cycle starts. See the image below:



Topic 21

Classroom Assessment: Link between Instruction and Assessment

- First of all, there is a link between teaching and learning
- Next link can be perceived between learning and assessment
- Assessment is linked to teaching also
- Teaching, learning and assessment make a loop

Topic 22

Classroom Assessment: Stakeholders of Assessment

- Students
- Teachers
- Parents
- Higher Administration
- Policy makers

All of them are the stakeholders of the process of assessment.

Topic 23

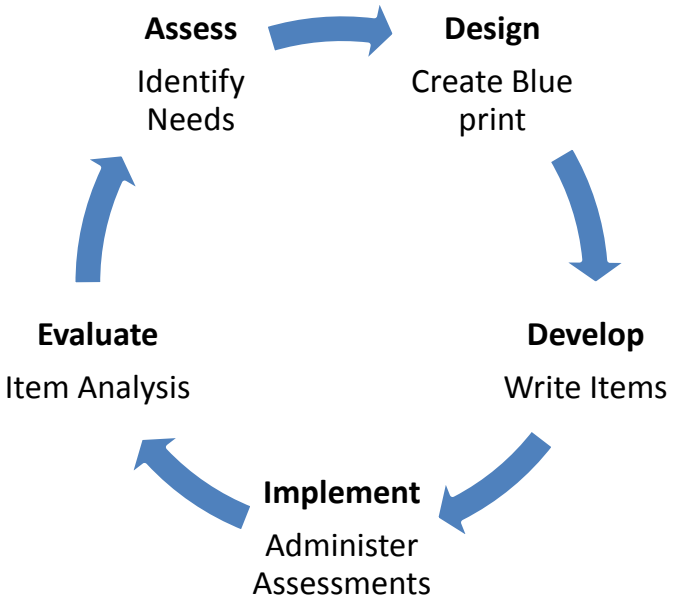
Classroom Assessment: Loop of Assessment

Assessment creates loops with the exams or tests and secondly with the process of assessment. Processes involved in assessment:

Design

- Develop
- Implement
- Assess

Steps involved in assessment:



Topic 24

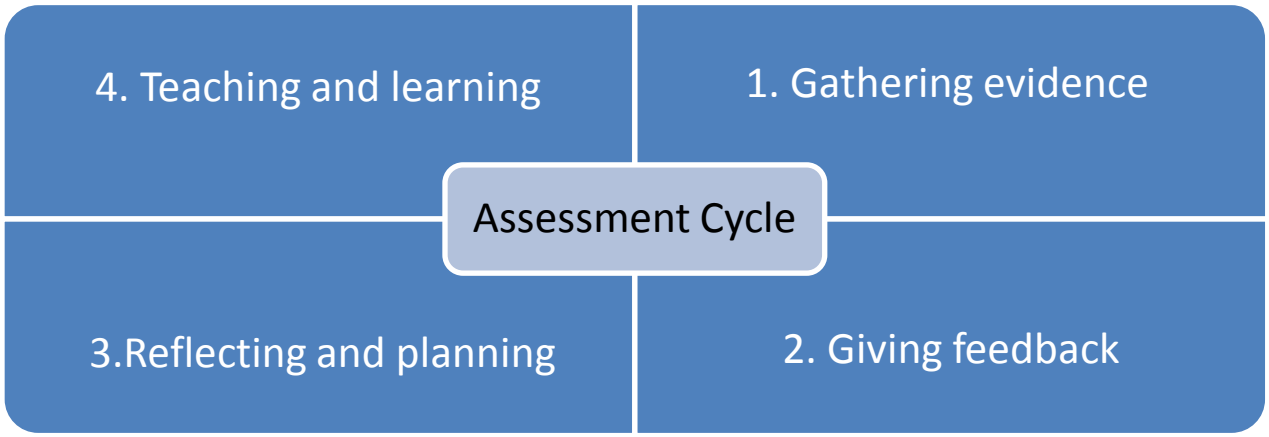
Classroom Assessment: Assessment Techniques and their Links with each other

Some techniques of classroom assessment are: probing about the topics, discussions, projects, assignments, paper-pencil test. Techniques of classroom assessment are placed and conducted under the umbrella of curriculum.

Topic 25

Classroom Assessment: Classroom Management

Classroom maintains a link between teaching and learning. Teaching and learning takes place in a certain context. Learner and learning are linked; they are linked with the teacher also. The links maintained in classroom refers back to the concept of loop as well.



Topic 26

Classroom Assessment: Reliability and related concepts

Reliability refers to the extent to which assessment results are consistent. The assessment that maintains the consistency in results is known as reliable.

“Reliability is the extent to which a measurement instrument or procedure yields the same results as on repeated trails (Carmines and Zeller, 1979)”

For example, a calculator cannot be reliable if it gives wrong calculations or results. The weight of an object is not reliable if machine is not working properly. Same is the case of the results obtained from assessments.

What is meant by the term of unreliable results? The unreliable results of assessment mean inconsistency. Keeping these views in mind, we can trust the results if these are consistent. It is the evidence of an accurate system of assessment. Keeping in view the significance of reliability, different methods are used to attain reliability. For example, test-retest procedure, the alternative –test form procedure and the split halves procedure.

Topic 27

Classroom Assessment: Test-retest Procedure

Same test, given two (or more) times. Example: One might develop a test and will be administered twice with the same students. If the subject provides very small answers both times, it means results will be similar. Then one can assume that the assessment results are reliable.

Advantages of using 'Test-Retest Procedure':

- This procedure has strong logical appeal, one is measuring more than once with the identical test.
- One avoids the problem of developing more than one test.

Disadvantages of using 'Test-Retest Procedure':

- Events taking place
- Persons might change
- Students become more practiced second time.

Topic 28

Classroom Assessment: Alternative-test Form Procedure

Create two forms of the same test (vary the items slightly). Reliability is stated as correlation between scores of Test1 and test 2. If students give similar answers, it means the results will be the same and it will have reliability.

Advantages:

- As tests differ though slightly, students cannot apply their guess work

Disadvantages:

- One has to develop two tests.

Topic 29

Split Halves Procedure

- Same test, administer once, grade each half separately, compare grades from each half.

Advantages

- Need to develop just one test.
- No maturation
- No cueing

Disadvantages

- What is the criterion of splitting halves?

Topic 30

Internal Consistency Procedure

- Same test, administered once, score is based upon average similarity of responses to the items. It is a measure of reliability used to evaluate the degree to which different test items that probe the same construct produce similar results.

Advantages

- Need to develop just one test.
- No maturation.
- No cueing.

Disadvantages

- Scholars do not agree on the formula applied to calculate internal consistency.

Topic 31

Coefficients range

- The value of reliability coefficients range from 0 to 1.0.
- A coefficient of 0 means no reliability.
- 1.0 means perfect reliability but hard to claim.
- If it is above .80, it is said to have good reliability; if it is below .50, it would not be considered a very reliable test.

Topic 32

Some other types of Assessment

Authentic Assessment

- It is a form of assessment in which students are asked to perform real-world tasks that demonstrate meaningful application of essential knowledge and skills.
- There are some other names used for authentic assessment: for instance alternative assessment or direct assessment.

Performance Assessment

- Performance assessments call upon the examinee to demonstrate specific skills and competencies, that is, to apply the skills and knowledge they have mastered. **(Stiggins, 1987: 34)**

Topic 33

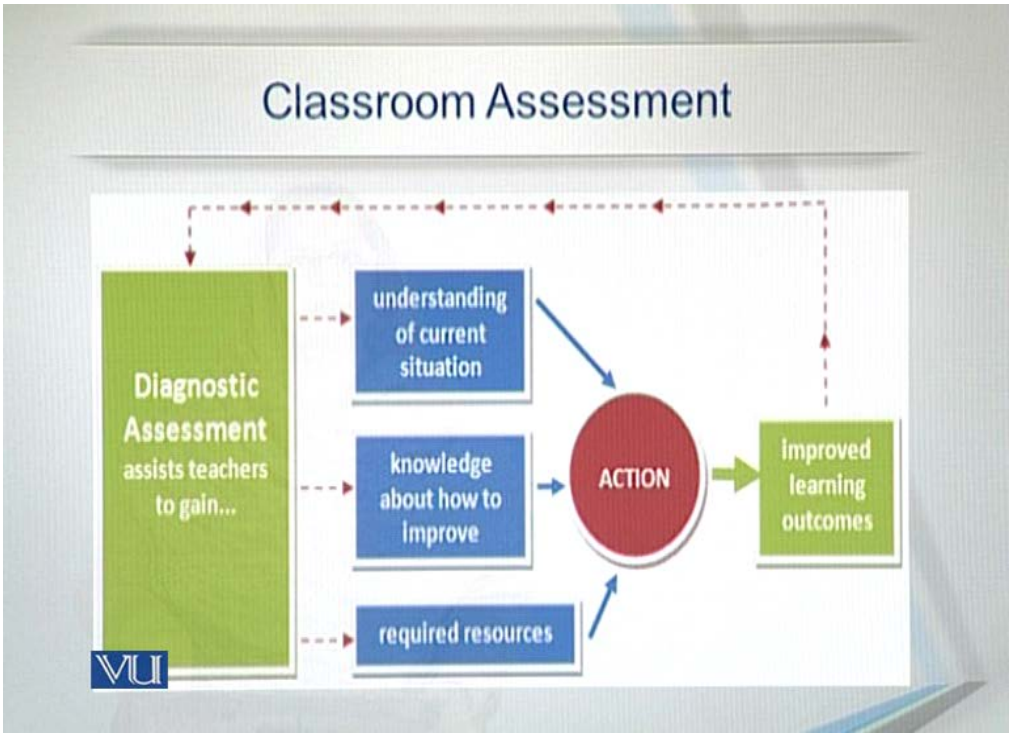
Authentic versus Traditional Assessment

a. Selecting a Response vs Performing a tsk.
   Traditional assessment targets a response like answering a question whereas authentic assessment asks for meaningful performance like group discussion.
b. More towards real life.
   Instead of preparing for the examination hall, it is more towards real life.
c. Recalling vs construction of Knowledge
   Traditional assessment (i.e., tests and quizzes) determine whether or not students have acquired a body of knowledge. Authentic assessments often ask students to analyze and apply what they have learned.
d. Indirect evidence vs Direct evidence
   Traditional assessment gives normally clues about the learning of some content whereas authentic assessment tries to focus on the personal capabilities to solve real life like problems.

Topic 34

Diagnostic Assessment

- Diagnostic assessment helps to diagnose weak areas of learners. It has normally been studied with reference to language learning.



- Diagnostic assessment looks for problem areas for a student during the learning process. It has been helpful especially in language and mathematical field.

Topic 35

Norm Referenced Assessment

- A norm referenced assessment makes judgments about people, on the basis of sources and distributions of scores. For instance, the top 10 percent of the class are awarded first class and the next 15 percent are awarded second class.
  A norm referenced assessment has been the most common type of assessment used in education.

- Though norm referenced assessment is very common, but does not give accurate and exact assessment. For example, a student who fails in one year may well have passed in others. Similarly getting higher grades does not mean higher capabilities.

Topic 36

Criterion Referenced Assessment

- Criterion referenced assessment makes judgments about performance, rather scores. It assesses the extent to which a student has received the performance outcomes of a subject.
- For example, oral presentations may be judged on the following criteria: knowledge of subject material, ability of responding to the questions, structure of presentation, use of audio/visual aids, pace and timing and delivery style.

Topic 37

Norm vs Criterion Referenced Assessment

- Norm referenced is more common and has been in practice for years where as criterion referenced is new and less practiced as compared to norm referenced.
- Norm referenced focuses more on scores where as criterion referenced targets the performance of students. Criterion is closer to real life situation as compared to norm referenced.

Topic 38

Validity and Related Concepts

- Validity means how well a test measures what it is supposed to measure.
- A vocabulary test can not be valid if it measures your grammar ability. Similarly, a comprehension test can not be valid if it measures vocabulary.
- What is meant by the term of ‘invalid test’? it means a test fails to measure what it is supposed to measure.

- We can trust the results if these have been attained from a valid test. It is the evidence of an accurate system of assessment.
- There are different types of validity like face validity, content validity, construct validity, criterion validity and predictive validity.

Topic 39

Face Validity

- Does the test appear to test what it is supposed to be tested?
- A drawing test must be related to figures, so the question paper should appear with figures. A test that asks for filling some blanks must have blanks on paper. A multiple choice question must have options along with it.

Topic 40

Content Validity

- Content validity refers to the contents a test is suppose to measure.
- For instance, a book has ten chapters; these chapters are the contents of the book.
- The topics of your course of assessment are the content of this course:
  { A,B,C,D,E.F.G,H…..}
- Test: {B,C,F,H}

Topic 41

Construct Validity

- Construct validity refers to the construction of a test.
- You have the contents; how do you make a test? How do you tackle the questions? The contents of the course should be aptly covered in the question paper.
- For instance:
  Contents: {A,B.C,D,E,F,G,H}
  Test questions: a1, a2, a3. e1, e2, e3.
  Test questions: b1, d1, f1,h1,a1.

Topic 42

Criterion and Predictive Validity

- How much a test can measure some performance with reference to some defined standards? It is known as criterion related validity.
- For instance, one is expected to be able to speak fluently after completing a course. So the test is valid if it can measure spoken ability.
- How much a test can predict future performance with reference to some defined standard? It is known as predictive validity.

Topic 43

Link between Reliability and Validity

Reliability and validity are related concepts. A test can not be reliable if not valid.

If data are valid, they must be reliable. If people receive very different scores on a test every time they take it, the test is not likely to predict anything. However, if a test is reliable, that does **not** mean that it is valid. For example, we can measure strength of grip very reliably, but that does not make it a valid measure of intelligence or even of mechanical ability. Reliability is a necessary, but not sufficient, condition for validity.

Topic 44

Free from Bias

What is Bias?

- Inclination for or prejudice against one person or group, especially in a way that is considered to be unfair; systematic unfair treatment of a particular group of individuals.
- There are different types of it:

- Unfairness
- Offensiveness etc.

Topic 45

Unfairness

- When some one's right denied due to like or dislike. In assessment, normally it is associated with teachers.
- It creates a mistrust among the stakeholders of assessment and hence affects the whole process. Unfairness questions the standards of assessment.

Topic 46

Offensiveness

- Using such language in question or such attitude that may offend some one. For instance the conflict between the white and the black in America during the civil war.
- Offensiveness not only deforms the image of the teacher, but also proves that assessment system is not reliable.

Topic 47

Assessment and physically challenged people

- Those who have some physical disability, must be facilitated in a balanced way.

Topic 48

Equality and Equity

- Giving equal opportunities to all is an important step to avoid biasness. Equality in time, in opportunities and equal standards for all in grading help to reduce biasness.
- Giving equal opportunities to all creates a harmony that leads towards equity.

Topic 49

Measures to Eliminate Bias

- Striving for diversity in test-development staffing and training test developers and scorers to be aware of the potential for cultural, linguistic and socioeconomic bias.

- Having test material reviewed by experts and trained.
- Screening for and eliminating items, references and terms that are more likely to be offensive to certain groups.
- Using multiple assessment measures to determine academic achievement and progress.

Topic 50

Assessment in classroom

Some definitions

“An assessment developed, administered and scored by a teacher to evaluate individual or classroom student performance”.

“Classroom assessment is an approach designed to help teachers find out what students are learning in the classroom and how well they are learning it”.

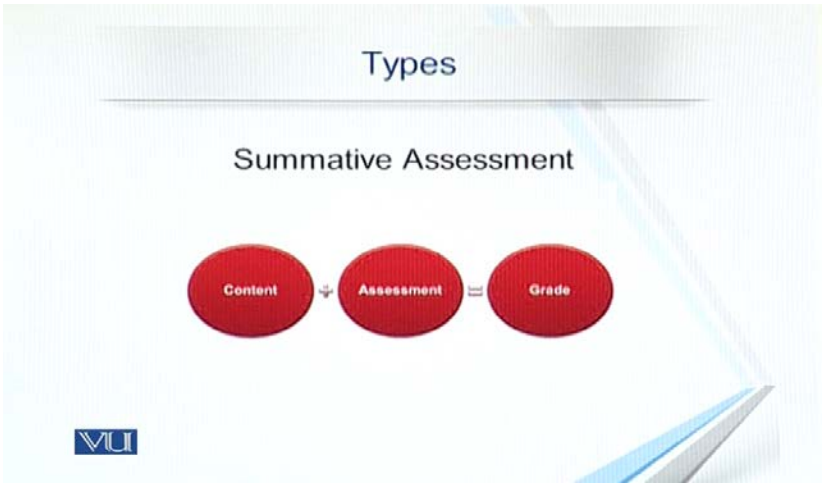
Topic 51

Types of assessment

There are different types of assessment like formative, summative, internal, external etc.

Formative assessment is ongoing assessment.

Summative assessment is associated with summing up. Our annual examinations are the typical example of summative assessment.



Process assessment means when you look at the whole process.

Product assessment

Diagnostic assessment

Topic 52

When you give some performance

- In criterion we assess the performance. For example our communication skills which we can not assess on paper pencil test.
- Debates and speeches, experiments projects and demonstrations are the example of performance based assessment.

Topic 53

Observation and perception

- Classroom interaction, student participation and involvement are the examples of this type of assessment.



Topic 54

Individual communication

- Presentation, small group discussion and interviews are the examples of this assessment.

Topic 55

Paper pencil test

- Test and examinations, written reports are the examples of paper pencil tests.

Topic 56

Washback effect and feedback

What is washback effect?

- Washback effects refers to the impact or influence of assessment practices (tests, exams or any other kind of assessment) in all of the individuals involved in the teaching-learning process.
- Tests whose results are observed by students, teachers, administrators, parents or the general public, as being used to make important decisions that immediately and directly affect them. (Madaus, 1988)

Topic 57

What is feedback?

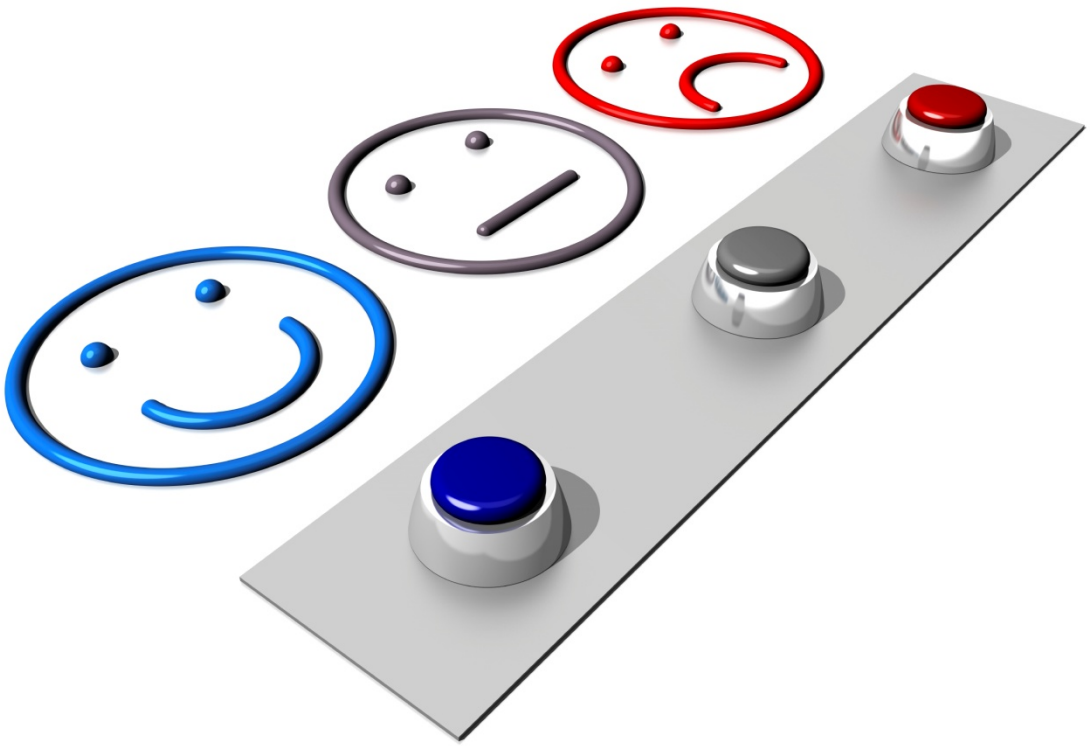
Helpful information or criticism that is given to someone to say what can be done to improve a performance, product, etc. The transmission of evaluative or corrective information about an action, event, or process to the original or controlling source with the aim of improving the process.

Topic 58

Washback effect and feedback:

Effective Feedback:

Effective feedback helps students to develop their understanding and improve their performance in relation to the standards of the learning. Effective feedback is giving specific information that improves the performance of individuals and then of the system overall.



Topic 59

Characteristics of effective feedback:

- It is specific and performance based.
- It is descriptive not labelling.
- It focuses on the behavior, not the learner.
- It is based on observations, repeated if possible.
- It balances negative and positive comments.
- It is well-timed.
- It is anchored to common goals (For example, the learner's vocabulary)

Topic 60

Some more characteristics of effective feedback:

- It is based on trust, honesty, and concern.
- It is private, particularly if it is negative.
- It is part of your regular teaching process, not an exception to the norm.
- It provides for follow up.
- It provides for two-way communication, soliciting, and considering the receiver's input.

Topic 61

Guidelines for giving constructive feedback:

- Give comments based upon observable behavior and not assumed motives or intends.
- Give positive comments first in order to give the student confidence and gain his/her attention.
- Emphasize the sharing of information.
- There should be opportunities for both parties to contribute.
- Don't overload the students.
- Give realistic feedback.



Topic 62

Classroom Assessment: Types of Feedback

Effective feedback: Goal is to get student to internalize the effective feedback. Feedback that is intended to be used by the learner independently.

Topic 63

Types of Feedback: Descriptive feedback

Goal is to improve student achievement by telling the learner how to move forward in the learning process. Feedback that is intended to tell the learner what needs to be improved. "Descriptive feedback is the practice of giving detailed information that provides specific direction for improvement and gives students opportunity for input."

Topic 64

Types of Feedback: Evaluative feedback

Goal is to measure student achievement with a score or a grade. Feedback that is intended to summarize student achievement. It does not give guidance on how to improve the learner's reasoning.

Topic 65

Types of Feedback: Motivational feedback

Goal is to make the learner feel good. Feedback that is intended to encourage and support the learner. It does not give guidance on how to improve the learner's reasoning.

Topic 66

Types of Feedback: Oral and written feedback

Oral feedback is given orally in classroom when you get your assignments/exam papers back after checking. Teacher's suggestions to improve your reading and writing skills discussed in classroom are all oral feedback. The guidance provided by the teacher face to face in classroom is the oral feedback.

On the other hand, written feedback is written on your assignments and exam papers. The written comments on your assignments etc. It can also be descriptive and effective feedback. Such instructions are very clear and directed.

Topic 67

Types of Feedback: Negative and Positive feedback

- Negative feedback fails to guide the student about the improvements to be made.
- Positive feedback guides the student clearly about the improvements to be made, hence there is no confusion.

Topic 68

Classroom Assessment: Feedback and Motivation

Motivation refers to the "reason underlying behavior" or "the attribute that moves us to do or not to do something." e.g. creating an engaging learning environment.

Topic 69

Types of Motivation:

Intrinsic motivation

2. **Extrinsic Motivation**

Intrinsic Motivation: Internal desires to perform particular task, people do something for attaining some purpose as an internal desire.

Extrinsic motivation: refers to external factors working to get some work done.

Topic 70

Motivation in Classroom:

When students feel a desire to work hard to achieve learning objectives. Intrinsic motivation takes them to the pleasure and satisfaction in attaining those goals. Extrinsic motivation is an external force which takes them to the achievement of learning goals. Extrinsic motivation can work as a reward or as a punishment.

Topic 71

Feedback affecting motivation:

Feedback is an important source of motivation. It gives an insight to the student that I must work hard. So it can be defined as a force taking you towards goals.

Topic 72

Feedback as Intrinsic and Extrinsic Motivation

Feedback serves as a source of intrinsic and extrinsic motivation when students feel an inner desire to work hard, it is intrinsic motivation. When student take feedback as an external source that compels them to work hard, it is extrinsic motivation. Feedback helps both the intrinsic and extrinsic motivation strategies to motivate the students towards getting good grades.

Topic 73

Negative and Positive feedback and Motivation:

Negative feedback fails to guide the students about the improvements to be made. No motivation can be expected here. Whereas positive feedback guides the student clearly about the

improvements to be made, hence there is no confusion, so positive feedback is always effective. Positive feedback always motivates the students about the improvements to be made. It can create intrinsic motivation which is actually desired in teaching and learning process.

Topic 74

Classroom Activities and Feedback:

"Whatever is carried out as teaching and learning procedure."

Classroom activities

1. Reading comprehension task.
2. Matching new vocabulary to definitions.
3. Role play that is freer oral practice of a grammar point.
4. Completing a text that has missing words.
5. Listening comprehension task.
6. Problem-solving information gap activity.
7. Discussion that is a lead-in to a reading text.
8. Written grammar task where students choose the correct tense

Feedback

- Nominate students randomly and put all suggested answers on the white board.
- Praise students' contributions and ideas.
- Encourage other students to ask questions about or comment on what each group says.
- Confirm which answers are correct.
- Ask students to check their answers in pairs.
- Ask some follow up questions and make comments on what students have said yourself.
- Get pairs to look at the unresolved answers quickly for a second time.
- If there is disagreement over the answers, accept both versions and write them on the white board.
- If you feel it is appropriate and useful, highlight a few errors you overheard in the discussion.
- Ask each group to decide what they will say in reporting their discussion.
- Elicit the outcome of the second pair discussion.

- Ask each group to tell the class what they have been talking about.

Topic 75

Classroom Activities and Feedback: Evidence of feedback

Feedback evidence can be gathered from the following activities:

- Conversation with pupils/parents/teachers
- Written evidence
- Oral questions
- Projects
- Cooperation in activities
- Cognitive abilities
- Discussion
- Progress in work
- Cooperation in activities
- Timeframe

Topic 76

How to use evidence for feedback:

Feedback gives information For practical activities:

- Can pupil make a start?
- Can pupil apply their knowledge to task?
- Can pupil choose appropriate materials?
- Can pupil report findings?

For written work:

- on knowledge and attitudes – what they know, think, feel.
- Also gives information on use of language, e.g. vocabulary, sentence structure, organization of ideas etc.

Topic 77

Keeping record of feedback:

Record of feedback can be kept **(How)**:

- In planners
- Worksheets
- Checklists
- Reports
- Students' work

Topic 78

Some images of Feedback

What should be written in feedback?

- Only what is useful and relevant for planning the next steps in learning and for reporting progress, brief notes, strength and weakness that is to be improved.

When:

- It should be well planned and pre-decided by the teacher

Topic 79

How can feedback be improved?

- Interacting with students
- Refining traditional feedback
- Feedback-rich assignments
- Bridging the gaps
- New ways of giving feedback
- Reshaping curricula and assignments
- Briefing and training of students
- Improving students in feedback

Topic 80

Classroom Assessment: Tools of Assessment

An assessment tool is a method of collecting information about a learner's performance and understanding about a certain topic. There are different types of these tools like observation, questionnaires, interviews, tests, projects etc.

Topic 81

Tools of Assessment: Observation

Classroom observation is a process by which a teacher observes one or more class sessions, records the practices and student actions.

Topic 82

Tools of Assessment: Interview

A formal face to face meeting normally designed with the purpose of assessment.

Purpose of Assessment through Interview:

- To investigate how well students understand and can apply a concept
- To identify gaps in understanding that may be common among students
- To document the general and content-specific procedures that students employ in application tasks and the sequences and manner in which processes are employed
- To document how student understanding and problem-solving skills change over time or with instruction
- To obtain verbal feedback from students about course structure, teaching techniques, and other aspects of the course or program of instruction

Topic 83

Tools of Assessment

Projects

An individual or collaborative enterprise that is carefully planned to achieve a particular aim and with the purpose of assessment.

Topic 84

Diaries and Portfolios

- A daily record, usually private, especially of the writer's own experience, observations, feelings, attitudes etc. here with the purpose of assessment.
- Portfolio assessment is an assessment form that learners do together with their teachers and is an alternative to the classic classroom test. The portfolio contains samples of the learner's work and shows growth over time.

Topic 85

Tests

A series of questions, problems or physical responses designed to determine knowledge, intelligence or ability.

Topic 86

Observation

Observation is the active acquisition of information from a primary source. In living beings, observation employs the senses. In science, observation can also involve the recording of data via the use of instruments. The term may also refer to any data collected during the scientific activity.

Topic 87

Overt and Covert observation

- Observation can be overt when everyone knows that they are being observed.
- Observation can be covert when nobody knows that they are being observed.
- The benefit of covert observation is that people behave naturally if they do not know they are being observed.
- However overt observations are preferred due to ethical problems.

Topic 88

Participation of the Observer

Participating role: when the observer takes part in activity and observes it as well.

Non-participating role: when the observer does not take part in activity and only observe it.

Topic 89

Conducting Observation

- Observations of others offer many possibilities for learning. Through observations, it is possible to discover causes of behavior, to increase acceptance of individual variations in growth and development, and interact with others on a more meaningful level.
- There are several observation techniques, such as a running record, factual record time sampling, checklists, hypothetical statement supported by facts, and others

Topic 90

Merits of Observation

- Direct
- Independent
- Natural

Topic 91

Demerits of Observation

Practicability

One of the main disadvantages of observation is that it can be very time consuming and resource intensive.

Observer Bias

A fundamental potential weakness of all observation is that it is susceptible to observer bias – subjective bias on the part of the observer – thus undermining the reliability and hence

the validity of the data gathered. This can be because the observer records not what actually happened, but what they either wanted to see, expected to see, or merely thought they saw.

Topic 92

Questionnaire



What is a Questionnaire?

A set of printed or written questions with a choice of answers, devised for the purpose of a survey or statistical study.

It serves four basic purposes:

1. Collect the appropriate data.
2. Make data comparable to analysis
3. Minimize bias in formulating and asking the question
4. Make questions engaging

Topic 93

Types of Questionnaire

- Open ended: an opportunity to express the opinions in a free-flowing manner.
- Closed format: respondents are restricted to choose among any of the given multiple choice answers.
- Yes/No format: respondents are to choose positive or negative answers.

Topic 94

Some More Types of Questionnaires

- Likert questions: how strongly respondents agree to a particular statement.
- Bi polar questions: two extreme answers written at the opposite ends of a scale.
- Leading questions: that lead to a particular type of answer.

Topic 95

Interpreting Questionnaire

Calculation like percentages and make inferences.

Topic 96

Merits of Questionnaire

- Practical
- Large amount of information
- Easy to manage
- Easy to analyze
- More reliable
- More valid
- Comparable

Topic 97

Demerits of Questionnaire

- Inadequate for certain information like thinking process, behavior.
  Questions are the reflection of the person who asks them.

- No way to tell how true the information is.
- No way to tell how thoughtful the respondent is. Respondents may understand differently.

Topic 98

Interview

A formal face to face meeting normally designed with the purpose of assessment.

It serves the purpose to get some specific information and also some assessment about the interviewee.



Topic 99

Structured and Semi Structured Interviews

- A structured interview, or a standardized interview is a method used in the survey research. The aim of this approach is to confirm that each interview is offered with exactly the same questions in the same order.
- The structured ones emphasis the Reliability- how accurately different respondents answers can be compared.
- A semi structured is open, allowing new ideas to be brought up during the interview as a result of what the interviewee says.
- In depth interviews emphasis validity-How close answers get to the respondent's' real views.

Topic 100

Transcribing an Interview

- Interview transcription is a word-to-word written documentation of a taped or live interview.
- Words like “OK” and “Good bye” have also been picked through apparently these do not carry any information.

Topic 101

Interpreting an Interview

We interpret the interview through the transcription.

Topic 102

Merits of Interview

- Practical
- Face to face
- Human side direct
- Body language
- Not influenced by others
- Higher response rate
- Participation from both sides

Topic 103

Demerits of Interview

- Time consuming (setting up, interviewing, transcribing, analyzing, feedback, reporting)
- Cost
- Inferences from transcription

Topic 104

Portfolio

What is a portfolio?

- A portfolio is a purposeful collection of student's work that exhibits the student's efforts, progress and achievements in one or more areas of the curriculum.
- It helps to get some specific information and also record of the progress made by the students in specific area.

Topic 105

Project and Growth Portfolios

- Project portfolios organizes a series of projects into a single portfolio of reports that capture project objectives and other critical factors.
- Growth portfolio organizes a record of the progress made in some specific area. For instance, about reading certain books or covering a certain syllabus.
- Record from starting point to the final stage is maintained.

Topic 106

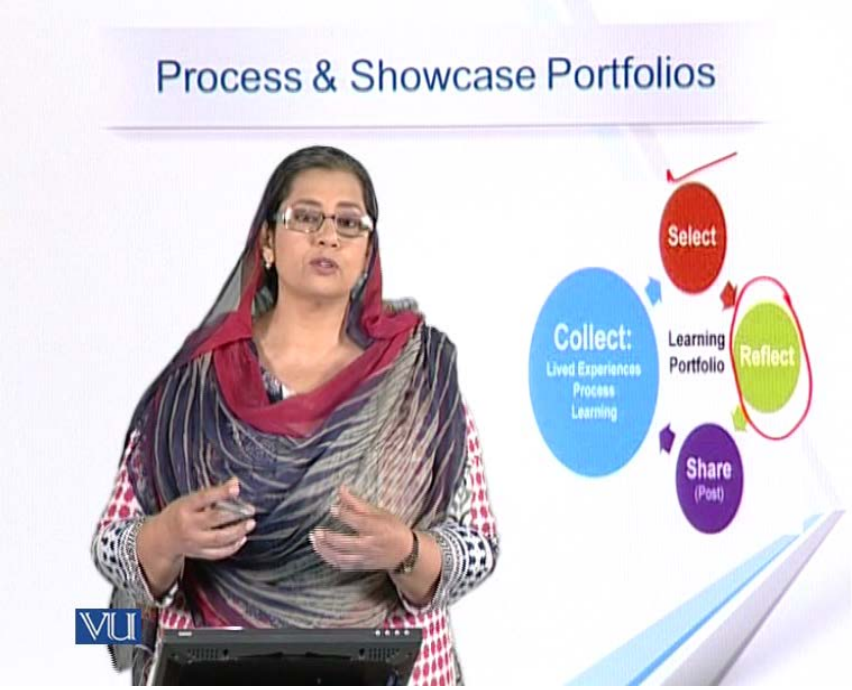
Achievement and Competence Portfolios

- Achievement portfolio maintains the record of one's achievement in certain area against specific targets.
- Whereas competence portfolio maintains the record of competition.

Topic 107

Process and Showcase Portfolios

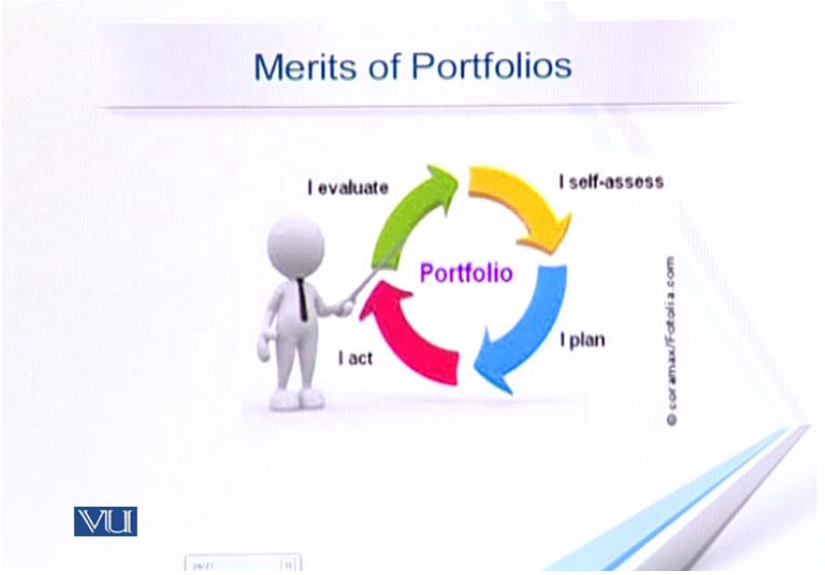
- Process portfolio records all phases of the learning process. They are particularly useful in documenting students' overall learning.



- Whereas showcase portfolio shows a record of your best achievements throughout the session with the purpose of assessment.

Topic 108

Merits of Portfolios



- Individualized instruction
- Self learning and competence
- Confidence
- Self trust
- Healthy competition with others
- Helping each other

Topic 109

Demerits of portfolios

- Measures relatively superficial knowledge
- Sometimes do not match the specific goals of program.
- Norm- referenced data may be less useful than criterion-referenced.
- More summative user and difficult to receive the results in a formative manner.

Topic 110

Diaries and Projects

Writing a Diary

To write a good diary entry you need to include …….

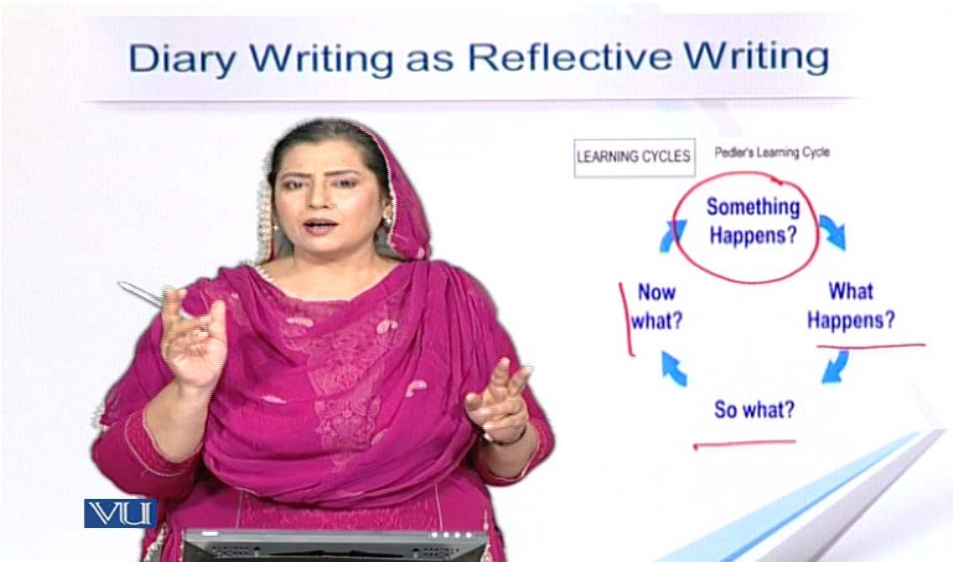
- Date
- Dear diary….to start
- First line summary
- Chatty style
- Written in the first person
- Written in the past tense
- Questions hope for the day

When someone maintains a date wise record of some routine by writing in diary.

Topic 111

Diary Writing as Reflective writing

It is interpreted as reflective writing: looking back, analyzing the event or idea; thinking carefully about what the event or idea means. Reflective writing is considered more personal.



Reflective writing provides an opportunity for you to gain further insights from your work through deeper reflection on your experiences.

Topic 112

Assessment of Diary Writing

A diary records behavior over a period of time. Often the information recorded shows changes in behavior, trends in performance, results of participation, progress or the regularity of physical activity. Students can be assessed on the basis of these standards.

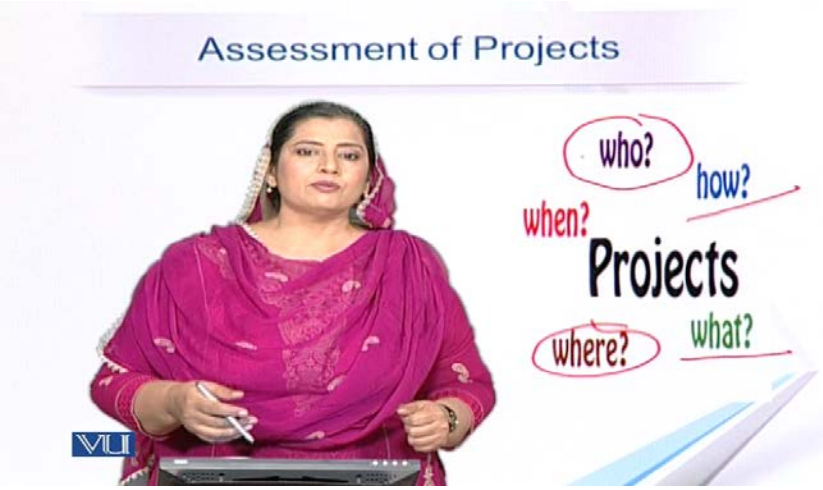
Topic 113

Projects as a Part of Class Work

- Projects assess student's understanding of a subject or a particular topic. Projects typically require students to apply their knowledge and skills while completing the prescribe task.
- Individual projects assigned to a student require student's knowledge, critical thinking, application of knowledge, time and work plan.
- Group projects involve a number of students working together on a complex problem that requires planning, research, internal discussion and presentation. Group projects should include a component that each student completes individually.

Topic 114

Assessment of Project



Students can be assessed on the basis of these standards given in the figure.

Topic 115

Merits and Demerits of Projects

Merits

- Individualized instruction
- Self learning and freedom

- Confidence
- Self trust
- Critical thinking
- Healthy competition with others
- Helping each other
- Social interaction

Demerits

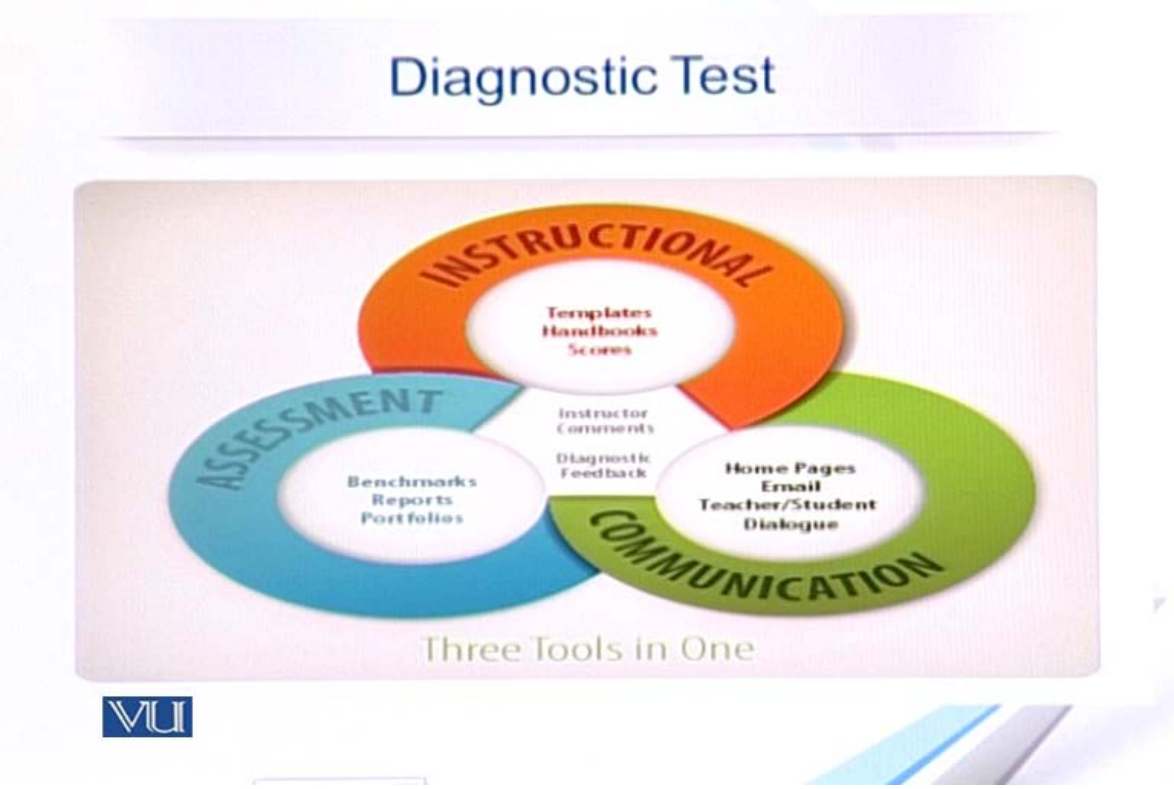
- Time consuming
- Financial resources
- Control
- Just focus on the project
- Clarity about assessment

Topic 116

What is a test? A procedure used to establish quality, performance or reliability of something (here the quality of teaching and learning). There are different types of tests.

Topic 117

Diagnostic test



Diagnostic tests measure students' weaknesses in subject area or skills. Teachers typically administer diagnostic test for reading and math skills, using the results to provide remedial instruction.

Topic 118

Standardized tests

A standardized test is any form of test that:

1. Requires all test takers to answer the same question or a selection of questions from common bank of questions, and that
2. Is scored in a "standard" or consistent manner, which makes it possible to compare the performance.

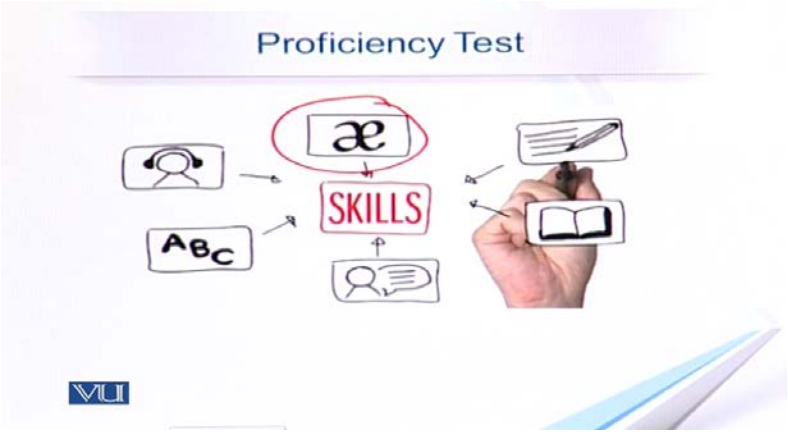
Topic 119

Achievement test

An achievement test is a test of skill and knowledge gained in a grade or level, usually through planned instruction, such as training or classroom instruction. Achievement is tested against certain objectives.

Topic 120

Proficiency test



A proficiency test measures a learner's level of language. It can be compared with an achievement test, which evaluates a learner's proficiency of specific skills.

Topic 121

Psychometric test

A psychometric test is an objective and standardized measure of a sample behavior.

Topic 122

Types of Questions

Objective: Yes/No Questions



Yes/No questions are simple questions with two possible responses. Such questions allow the rapid assessment of large amounts of material.

There is very little educational benefit in using these questions.

Topic 123

True/False/Not Given

The student:

- Analyses a statement
- Assess whether the information is true or false or not given.
- Marks an answer
- Effective
- Simple logic
- More reliable than yes/no questions

Topic 124

Filling the Banks

- In practice
- Simple logic
- Particular/common information
- Information and vocabulary
- Close test
- Needs more comprehension

Topic 125

Multiple Choice Questions

- One statement with choices given to be filled
- Correct answers with distractors

  Students analyze the statement and mark the correct answer

Topic 126

Matching sentences/columns

- Two lists of words/phrases/sentences
- Multiple choice
- Used for recognition of relationships and making associations
- Used for a wide range of subject matter

Topic 127

Assessment of objective questions

- Easy to make and mark
- Standardized responses
- Should be written with clarity
- Clearly communicated

Topic 128

Some other types of questions

Arranging information

- Sequencing events in a story.
- Analysis and reasoning is used and the information is arranged in a correct sequence. Re-writing or the use of vocabulary is not required from the student's side.
- Such questions can be assessed like objective questions, so there is no difficulty in marking them. Reasoning can be tested, but these type of questions cannot be used in all of the subjects.

Topic 129

Labeling a figure/diagram

- Exact knowledge about specific parts is required to attempt the question which means the students must be having the complete understanding of the object being asked about.

- Such questions are normally used in science or geographical subjects. These might used not to be in every subject. These are assessed as objective questions.

Topic 130

Short answers

The student needs to give:

- Precise information
- Specific information
- Complete understanding

Topic 131

Some Other Types of Questions

Assessing Short Answers

These can also be covered under the heading of objective questions. Students may often memorize short answer questions with rote learning. If assessors wish to use short answer questions to assess deeper learni9ng, careful attention (and many practices) on appropriate questions are required. It is very important that the assessor is very clear on the type of answers expected when setting the questions, because these are open-ended questions, students are free to answer any way they choose; short answer questions can lead to difficulties in grading if the question is not worded carefully.

Topic 132

Essay Type Answers

- Very common
- Explain in detail, based on the information
- Critical analysis
- Cause/effect
- Compare/contrast

Answers are written according to the general rules of academic writing. Use indications; being each paragraph with a topic sentence; support the topic sentence(s) with reasons and/or examples; use translation words to show logical organization; write a conclusion. Use correct punctuation throughout.

Topic 133

Assessing Essay Type Answers

- Introduction
- Explanation
- Critical analysis
- Cause/effect
- Compare/contrast
- Academic writing
- Coherence
- Sunning up and conclusion

Topic 134

Objectives and Assessment



What is an objective?

- A specific result that a person or system aims to achieve within a time frame and with available resources.
- Something that one's efforts or actions are intended to attain or accomplish; purpose; goal; target; the objective of this lesson; the objective of a seminar; the objective of a fund raising etc.

Topic 135

Difference between an aim and objective

- The aims of a course are broad statements of its purpose or intent. The aim encompass the purpose and philosophy of the course, specifying its overall direction and content. - - They let students know what you will be teaching them over a study period and what they may learn by taking the course.
- Learning objective is to be explicit about what the students do, and what we need them to learn to achieve the aim. Learning objectives may be written with respect to knowledge, skills and attitudes. For an objective to be claimed it must be assessed; therefore there must be an alignment between objectives and assessments.
- **The principal difference between aims and objectives is that aims represent the broad goal of your course while the objectives are the steps the students need to take in order to get there.**

Topic 136

Teaching process Reflective objectives

- Objectives articulate the knowledge and skills you want students to acquire by the end of the course.
- Instructional strategies are chosen to foster students learning towards meeting the objectives.
- Methods, techniques, strategies and materials all are decided in the light of objectives.

Topic 137

Linking objectives with assessment

- Objectives articulate the knowledge and skills you want students to acquire by the end of the course,
- Assessment allows the instructor to check the degree to which the students are meeting the learning objectives.
- Assessment must align with the instructional techniques; otherwise objectives will not be attained.

Topic 138

Objectives and Assessment: Examples

Example # 1 Teaching of definitions

Assessment: Define so and so ….

Example 3 2 Teaching explanations

Assessment: Define, explain …..

Example # 3 Teaching diagrams

Assessment: Draw a picture of …..

Example # 4 Teaching comparisons

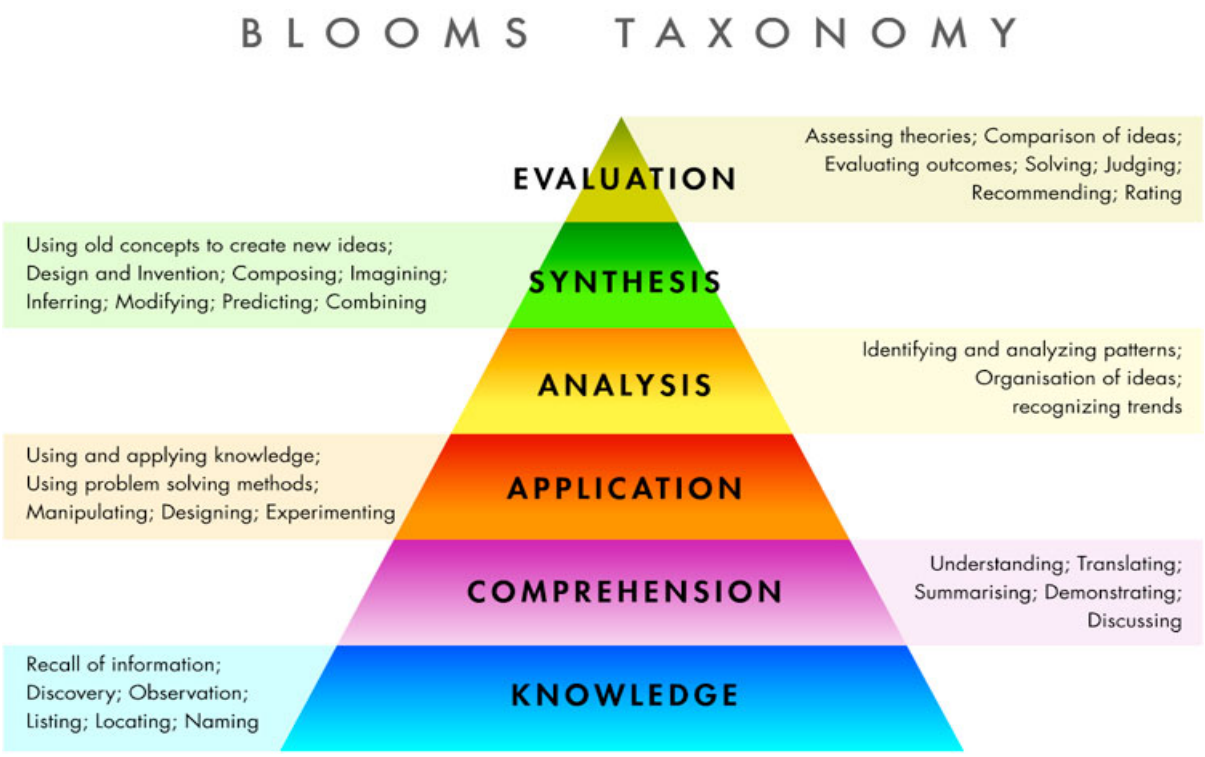
Assessment: compare, contrast ….

Topic 140

Knowledge Level

What is Knowledge level?

- Exhibits previously learned materials by recalling the facts, terms, basic concepts and answers.



Topic 141

Knowledge Level

At Knowledge Level of Learning a student can define terms

Related Verbs and Words

- Arrange
- Define
- Describe
- Duplicate
- Identify
- Label
- List
- Match
- Memorize
- Name
- Outline
- Recognize
- Relate
- Recall

- Repeat
- Reproduce
- State
- Who
- What
- When

Recalling and remembering previously learned information is knowledge level.

Topic 142

Knowledge Level Objectives

Knowledge refers to rote memorization of facts and information.

1. Students will be able to define nouns.
2. Students will be able to name the items given in the pictures.

Topic 143

Knowledge Level Questions

These questions test rote memorization of facts or information.

For example:

What is…..? Where is…? When did….?

1. What is a noun?
2. Define the concept of action words?

Topic 144

Knowledge Level

Same level Objectives and Questions

Example 1:

Objective: Students should be able to define noun.

Question: What is a noun?

Example 2:

Objective: Students should be able to name the places shown in the map.

Question: where is this place located?

Topic 146

Bloom's Taxonomy

What is Taxonomy?

- Taxonomy is the science of classification according to a predetermined system, whose resulting catalogue is used to provide a conceptual framework for discussion or analysis.

Topic 147

Bloom's Taxonomy

- Bloom's Taxonomy was created in **1956** under the leadership of educational psychologist **Dr Benjamin Bloom** in order to promote higher forms of thinking in education, such as analysing and evaluation concepts, processes, procedures and principles rather than just remembering facts (rote learning).

- It is most often used when designing instruction or learning processes. One gets clear about the level and depth of learning process. It is helpful in writing objectives and then in forming questions.

Topic 148

Bloom's Taxonomy

Three Domains

Cognitive: Mental skills (knowledge)

Affective: Growth in feelings or emotional areas (attitude or self)

Psychomotor: Manual or physical skills (skills)

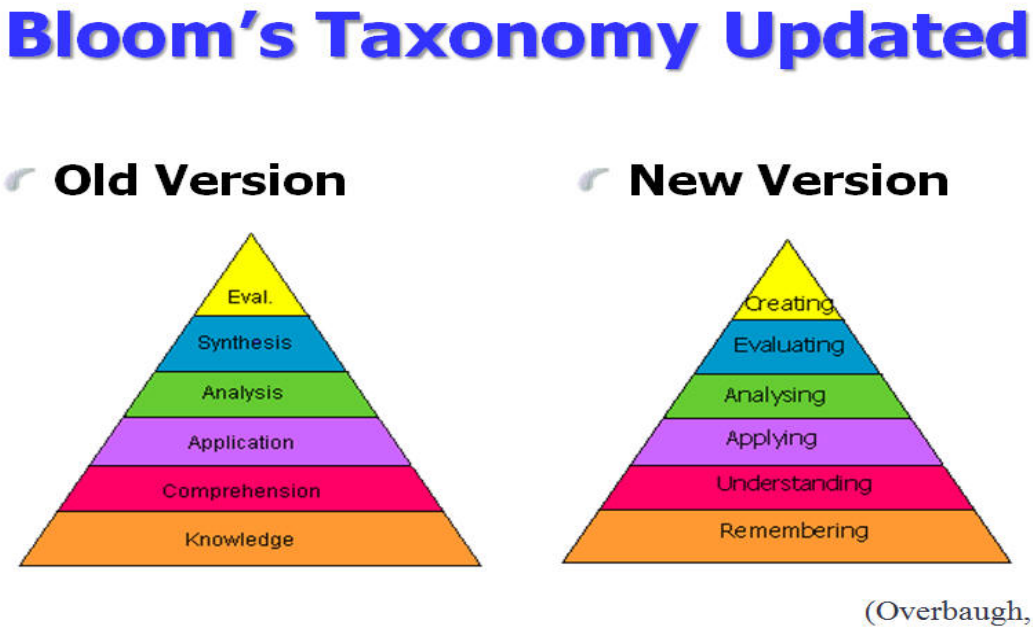
Topic 149

Bloom's Taxonomy

Explanation and Significance

- Words tend to convey wide range of meanings.
- Domains can be thought of as categories.
  Three categories are referred as KSA (Knowledge, Skills, Attitudes or Abilities)
  Taxonomy of learning behaviors may be thought of as " the goal of the learning process".

- After a learning activity, learner should have acquired a new skill, knowledge and attitude.



(Overbaugh, 2009)

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Topic 150

Cognitive Domain

- The most-used of the domains refers to knowledge structures (although sheer "knowing the facts" is its bottom level). It can be viewed as a sequence of progressive contextualization of the material.

Changes in Bloom's Taxonomy

- There is an interchange of two top levels: Evaluation and Synthesis.
- The names of six major categories were changes from noun to verb forms.
- Comprehension and synthesis were retitles to understanding and creating respectively.

Topic 151

Explanation of Cognitive domain

Knowledge: Familiarity

Comprehension: Understanding

Application: Use of knowledge

Analysis: Differentiation into parts

Synthesis: Creation

Evaluation: Judgements

Topic 152

Comprehension Level

What is Comprehension level?

- Demonstrating understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions and stating main ideas.

Topic 153

Comprehension Level

Related Verbs and Words

- Demonstrate
- Interpret
- Explain
- Extend
- Illustrate
- Infer
- Outline
- Relate
- Rephrase
- Translate
- Summarize
- Show
- Classify

Grasping the meaning of information is comprehension.

Topic 154

Comprehension Level Objectives

At this level learner can restate in his own words that he has stored in memory.

1. Students will be able to explain the theory.
2. Students will be able to discuss the global warming.

Topic 155

Comprehension Level Questions

These questions test the understanding about of facts or information.

How is…? Why is….?

1. How does global warming affect us?
2. Explain the role of action words?

Topic 156

Comprehension Level

Same level objectives and questions

Example 1:

Objective: students should be able to explain global warming.

Question: Discuss the concept of global warming?

Example 2:

Objective: Students should be able to paraphrase the poem.

Question:

Explain the following stanza with reference to the context?

Topic 157

Comprehension Level

Mismatch b/w Objectives and Questions

The objectives and assessment of some course do not show the same level of cognition.

Example:

Objective: Students should be able to summarize the poem.

Question: Evaluate the poem?

Example:

Objective: students should be able to interpret the story.

Question: Review the story?

Topic 158

Application Level

This level refers to applying gained knowledge to actual situations

Topic 159

Related Verbs and Words

Blooms Taxonomy

Apply, build, construct, develop, Interview, make use of, organize, solve, utilize, model etc.

Solving problems by applying acquired knowledge, facts, techniques and rules.

Topic 160

Application Level Objectives

Blooms Taxonomy

Knowledge and understanding are applied to solve some problem or build further knowledge.

1. Students will be able to solve the mathematical problem.
2. Students will be able to suggest some reforms.

Topic 161

Application Level Questions

These questions test the ability to apply your knowledge.

How will you…?

1. Solve the following problem?
2. How will you arrange the following words into a meaningful sentence?

Topic 162

Same Level Objectives and Questions

Example:

Objective: Students should be able to apply this formula for mathematical problem.

Question: Are these mathematical answers correct?

Example:

Objective: Students should be able to modify the given passages.

Question:

How will you change this paragraph into interrogative?

Topic 163

Mismatch b/w objectives and questions

The objectives and assessment of some course do not show the same level of cognition.

Example:

Objective: Students should be able to find the moral of the story.

Question: Compare the story with a plot of a novel?

Example:

Objective: Students should be able to apply their understanding to make correction.

Question: what are the positive points in the given paragraph?

Topic 164

Analysis Level

What is analysis level?

Examining and breaking information into parts by identifying motives or causes;

Making inferences and finding evidence to support generalizations.

Blooms taxonomy

Topic 165

Related Verbs and Words

Blooms Taxonomy

Analyze, categorize, classify, compare, contrast, discover, divide, examine, inspect, simplify, test for distinguish, distinction, theme, relationships, function, motive, inference, assumption.

Breaking down objects or ideas into simpler parts and seeing how the parts relate and are organized.

Topic 166

Analysis Level Objectives

Blooms Taxonomy

One should be able to analyze a system and divide into its constituent parts.

1. Student should be able to understand the parts of a microscope.
2. Students will be able to recognize the parts of speech.

Topic 167

Analysis Level Questions

These questions test the ability to analyze an item or system on the basis of learning.

What are the parts or features of …?

1. Distinguish between hard disc and removable disc?
2. How will you analyze the role of light in photosynthesis?

Topic 168

Same level Objectives and Questions

Example:

Objective:

Students should be able to divide the system into its parts.

Question:

Recognize the parts of the system and place them correctly?

Example:

Objective: Student should be able to differentiate between antonyms and synonyms.

Question:

Replace the given words by synonyms.

Topic 169

Mismatch b/w Objectives and Questions

The objectives and assessment of some course do not show the same level of cognition.

Example:

Objective:

Students should be able to infer the message carried by each paragraph.

Question:

Evaluate this paragraph?

Example:

Objective: Students should be able to contrast these two devices.
Question: Synthesize the function of two devices?

Topic 170

Synthesis Level

What is Synthesis Level?

The level refers to compiling information together by combining elements in a new pattern or proposing alternative solutions.

Blooms Taxonomy.

Topic 171

Related Verbs and Words

Blooms Taxonomy

Combine, Compile, Compose, Construct, Create, design, develop, estimate, formulate, invent, originate,
plan,Propose,Solution,suppose,modify,improve,adapt,minimize,maximize,delete,theorize,elaborate, improve.

Rearranging component ideas into a complete presentation.

Topic 172

Synthesis Level Objectives

Blooms Taxonomy

Knowledge and understanding are applied to compile information to build or pattern.

1. Student will be able to complete the story with the help of hints.
2. Students will be able to rearrange the jumbled words to make a sentence.

Topic 173

Synthesis Level Questions

These questions test the ability to construct/ synthesize something on the basis of your learning.

What changes would you make…?

1. How will you design your classroom for language learning activities?
2. How will you assemble the following words into a meaningful sentence?

Topic 174

Same Level Objectives and Questions

Example:

Objective:

Student should be able to give their judgment about inactive teaching.

Question: Do you recommend interactive teaching?

Example:

Objective:

Students should be able to evaluate the novel?

Topic 175

Mismatch b/w Objectives and Questions

The objectives and assessment of some course do not show the same level of cognition.

Example:

Objective:

Student should be able to compare a story from the pictures.

Question: Evaluate the story shown in picture?

Example:

Objective:

Students should be able to construct a model for teaching.

Question:

Evaluate teaching material?

Topic 176

Evaluation Level

What is evaluation level?

This level refers to making judgments about information validity of ideas or quality of work based on a set of criteria.

Blooms Taxonomy

Topic 177

Related Verbs and Words

Blooms Taxonomy

Awards, Criticize, decide, defend, evaluate, judge, justify, compare, mark, rate, recommend, appraise, support, prove, disprove, assess, value, estimate, etc.

Making judgments based on evidence or criteria.

Topic 178

Evaluation level objectives

Blooms Taxonomy

Knowledge and understanding are applied to judge and evaluate something.

1. Students will be able to assess the system of taxation.
2. Students will be able to give their opinion about educational reforms.

Topic 179

Evaluation level Questions

These questions test the ability to judge something on the basis of your learning.

Can you access the value…?

How will you justify the educational reforms?

2. Do you value the changing methodologies of teaching?

Topic 180

Same level objectives and questions

Example:

Objective:

Students should be able to compile the information into a report.

Question:

Write a report of your project?

Example:

Objective:

Students should be able to improve the given plan.

Question:

Formulate a new plan by mentioning the flaws of the previous one?

Topic 181

Mismatch b/w Objectives and Questions

The objectives and assessment of some course do not show the same level of cognition..

Example:

Objective:

Students should be able to give their opinion about abstract art.

Question: Define abstract art?

Example:

Objective: Students should be able to give their judgment about economic conditions prevailing today

Example:

Question: How do you comment about the social condition ' prevailing today?

Topic 182

Objective:

Yes/No Questions

Yes/No questions are simply multiple choice questions with two possible responses.

- You know
- You understand
- You apply



Topic 183

Objective:

Filling blanks with and without options

Fill in the blanks

In my pocket there is a …….?

- Simple logic
- Particular/ Common information
- Information and Vocabulary
- You know
- You understand
- You apply
- You analyze
- You synthesize

It means all of these five levels are involved when blanks are filled.

Topic 184

Multiple Choices

One statement having multiple choices

Correct answer with distractors

Students analyze the statement and mark the correct answer

- You know
- You understand
- You apply
- You analyze

Topic 185

Matching Sentences

- Two lists of words/phrases/sentences
- Multiple choices
- Used for recognition of relationships and making associations
- used for a wide range of subject matter

- You know
- You understand
- You apply
- You analyze
- You synthesis

Topic 186

Arranging Information and Bloom's Taxonomy

Analysis and reasoning is used and the information is arranged in a correct sequence.

Re-writing or use of vocabulary is not required from the student's side.

- You know
- You understand
- You apply
- You analyze
- You synthesis

Topic 187

Short Answers

The student needs to give:

- Precise information
- Specific information
- Complete understanding

- You know
- You understand
- You apply
- You analyses
- You synthesis
- You evaluate

Topic 188

Item Analysis

What is Item Analysis?

Item and distracter analysis

Item analysis is a process which examines student responses to individual test items (questions) in order to assess the quality of those items and of the test as a whole.

Item Analysis deals with:

- Item Difficulty
- Item Discrimination
- Effectiveness of Distractors

Topic 189

What is Item Difficulty?

- Item difficulty is simply the percentage of students taking the test who answered the item correctly.
- The larger the percentage getting an item right, the easier the item.
- For instance, if the percentage of correct answer is 85%, it means the item is very easy.
- If the percentage is 15%, it means the item is very difficult.
- The proportion for the item is usually denoted as p and is called item difficulty (Crocker & Algina,1986)

Topic 190

Calculating Item Difficulty

P: Correct Responses/ Total Responses

P=H+L/N

H is high scorers with correct responses

L is low scorers with correct responses

N is total number of students.

For instance:

Total Responses::42

Correct

Responses:18

p=18/42: 0.42

For instance:

Total Responses: 40

Correct responses=35

p=3S/40: 0.87

High	Medium	Low
(Difficult)	(Moderate)	(Easy)
<= 30%	> 30% AND < 80%	>=80%

P= Correct

Responses/Total Responses

Item difficulty should be moderate.

Topic 191

High and Low Performers

When the test result is divided and arranged into two groups on the basis of total scores.

Topic 192

What is Discrimination Index?

The ability of the test to differentiate between good (High Scoring) and poor (Low Scoring) students

Topic 193

Calculating Discrimination Index

D= H-L/ N

H is high scorers with correct responses.

L is low scorers with correct responses.

N is total number of students.

For instance:

H=12

L=3

N=15

D=12-3/1S=.60

D= H-L/ N

Its value should be around .50-.75.

Topic 194

More about Item Analysis

More about Item Analysis Distractors

Item Analysis deals with:

- Item Difficulty
- Item Discrimination
- Effectiveness of Distractors

Distractors are various alternatives chosen to be as close as possible to the right answer. In good test construction, all distractors should be feasible and reasonable and should apply directly to the steam.

Topic 195

What is Distractor Analysis?

The best distractor is one that contains the common mistakes that students will make.

In distractor analysis, however, we are no long: interested in how test takers select the correct answer, but how the distracters were able to function effectively by drawing the test takers away from the correct answer.

Topic 196

Analyzing Distractor

D= H-L/ N

H is high scorers with correct responses

L is low scorers with correct responses

N is total number of students

Each column is showing a different value as it has been calculated for each distractor separately.

Topic 197

Interpretation of the Analysis

The value .33 is acceptable because it discriminates between high and low. The value for distractor B is 0 so no discrimination between high and low groups. C has been chosen more by the weak students.

Topic 198

Putting Responses on a Sheet

By looking at the sheet, you can know about the responses to distractors.

Topic 199

Significance of Distractor Analysis

- Distractor analysis can be a useful tool in evaluating the effectiveness of distractors. When distractors are not effective, they are virtually useless.
- Good quality distractors ensure that the outcome of the tests provides more credible and objective picture of the knowledge of the test takers.

Topic 200

Marking and Assessment

What is Marking?

Marking is when you set a certain standard numerically about certain task. Here we are discussing the work oral or written.

To identify what is required for achievement of each of the grades being awarded .Student work is then judged to fall at a given point within the range of descriptors.

- Marks
- Grades
- Percentage

Topic 201

Clarity in Questions

Questions should be written very clearly. There should be no confusion what to be answered.

Students cannot answer correctly if they are confused about the statements of questions.

Topic 202

Clarity in Marking Scheme

Marking scheme should be clearly conveyed to students that will help them to arrange their answers as is required

For instance:

Q. What is Bloom's taxonomy? (10)

Or

a. Name three domains of Bloom's taxonomy. (1.S)

b. How does this taxonomy help in context of teaching and learning? (8.5)

Topic 203

Level of Question and Marks

For instance:

Q. What is Bloom's taxonomy? (10)

Or

a. Name three Domains of Bloom's taxonomy.(1.5)

b. How does this taxonomy help in context of teaching and learning? (8.5) w

Distribution of marks should be decided according to the levels of cognition. The lower the level, the lesser the marks. Similarly more marks will be allocated to higher level questions.

Topic 204

Co-ordinations

A coordination must be maintained starting from objective to teaching and then to questions of assessment.

This co-ordination must be perceived in the allocation of marks also. For instance:

1. Objective: Knowledge level

2. Teaching and assessment: Knowledge level

3. Marks: 2-3

Topic 205

Sharing with Students

This co-ordination must be shared with the student.

For instance:

1. Objective: Knowledge level

2. Teaching and assessment: Knowledge level

3. Marks: 2-3

Topic 206

Rubrics

What are Rubrics?

A rubric is a scoring tool that teachers use to assess student learning after a lesson.

A rubric usually in the form of a matrix or grid; is a tool used to interpret and grade students' work against criteria and standards. Rubrics are sometimes called "criteria sheets", "grading schemes", or "scoring guides".

Topic 207

Elements in Rubrics

A set of criteria that provides an interpretation of the stated objectives (performance, behavior, quality).

A range of different levels of performance between highest and lowest.

Descriptors that specify the performance corresponding to each level, to allow assessors to interpret which level has been met.

Topic 208

Example from IT

This should be noted that starting from the highest point, the standards set over here, gradually move towards lower standards.

Topic 209

Example from Speaking Task

Certain standards have been set and then levels of performance have been defines against these standards.

Topic 210

Objectives & Rubrics

Learning objectives --------Institutional activities-------Assessment

Objectives of a lesson or topics help in setting rubrics.

Whatever is needed as objectives, must be reflected in the grid of rubrics.

Topic 211

Significance of Rubrics

Using a set of criteria and standards (directly tied to the stated learning objectives), educators can assess each student's performance on a wide variety of work, ranging from written essays to class projects.

A rubric makes explicit a range of assessment criteria and expected performance standards. Assessors evaluate a student's performance against all of these, rather than assigning single subjective score. :

Using a set of criteria and standards (directly tied to the stated learning objectives), Educators can assess each student.

Topic 212

More about Rubrics

Assessment rubrics can be used for assessing learning at all levels, from assignments, a course projects, larger research or design projects and learning portfolios.

Topic 213

Challenges

When learning outcomes relate to higher levels of cognition (for example, evaluating or creating).

It can be difficult to include different dimensions.

- When changing these detailed standards to grades.
- Workload for teachers.
- Students sometimes depend too much on these standards.

Topic 214

Some Requirements

Prepared and available for students well before they begin work on tasks

Discuss assessment rubrics with students in class

Students should be familiar with these standards.

Practice using rubrics in class

Frame your assessment

Feedback to students in the terms laid out in the rubric.

Involve students while forming rubrics.

Topic 215

Developing Rubrics

Develop the goals.

Select the assessment tasks.

Develop performance standards.

Differentiate performances.

Assign marks to these categories.

Topic 216

Scoring Rubrics

- Exemplary
- Good quality
- Average
- Below average

1st at the top is related to the best performance. The last shows the least level. Two in the middle is related to average. According to the subject and objectives, the remaining grid is filled.

Topic 217

Objectives and Assessment

The standards are set according to objectives of the course, topic or lesson. It should be shared with students.

The same grid can be used for assessment also if related question is to be asked. These rubrics have already been shared with students. This way similarity in objectives and assessment is maintained.

Topic 218

Mode, Frequency & Range

What is Mode?

The mode is the value which appears the most often in the data. It is possible to have more than one mode if there is more than one value which appears more than others.

For instance:

2,15,6,8,4,6,10,3,6,13,6,11,6

Mode: 6

The data values: 2,2,3,5,5,7,8

The values which appear most often are 2 and 5.

They both appear more time than any of the other data values.

Topic 219

Significance of Mode

It tells you about the frequent numbers in some data (result).

For instance, out of 100 marks, 62, or 82 is the mode.

It means that the largest group among students (in an example of a result) is capable of scoring this number. Mode helps a lot in large set of data.

Topic 220

Mode, frequency and Range

What is Frequency?

The frequency is the number of times each value occurred. For example, if 24 occurs 6 times in some data, its frequency is 6.

Topic 221

Significance of Frequency

It gives us the number of repetitions in some data which helps to understand the position of some number. It helps in certain calculations like standard deviation.

Instead of writing 2,2,2,2 and 5,5,5, we write that the frequency of 2 is 4 and the frequency of 5 is 3.

Frequency helps in large data.

Topic 222

What is Range?

The range is the difference between the lowest value from the highest value.

For instance: 87 is the highest value and 33 is the lowest value, the range will be 87-33=54

To find the range, you first need to find the lowest and highest values in the data.

Topic 223

Significance of Range

It helps us to know the difference between the two extremes in the data.

It is particularly helpful where more than one values are being studied, an example of a store.

Topic 224

Median

The median is the value that lies in the middle of some score when the score has been arranged.

For instance:

6, 17, 22, 24, 24, 29, **30**, 36, 41, 45, 47, 50, 52

Median: 30

Topic 225

Median

(Number of Scores is Odd)

If the number of values is an odd number, simply the middle position score is the median.

The data values:

10, 12, 14,18, 20, 22, 25

Median: 18

Topic 226

Median (Number of Scores is Even)

If the number of some data values is even, then scores can be divided into two equal halves and there is no value left in the centre.

For instance:

6

8

1215

20

There are 6 score which can be divided into two equal halves.

Here median is the average of two values situated in the middle.

Median = 12=15/2

= 13.5

Topic 227

Significance of Median

It gives you the position of each score separately.

The median helps to locate the position of each score independently which helps us to know the tendency of some score/result.

Topic 228

Central Tendency of Data

Central tendency refers to the middle point of some data. Median and central tendency may refer to the same value in some data.

Example:

6,6,7,9,12,15,17,18,20,22,26,29,30

Here 17 is the median and shows the central tendency at the same time.

Topic 229

Mode, Median, Central Tendency

Mode is the most frequent score where as median and central tendency refer to the middle score or value in some data.

Example

4,5,6,7,8,9,12,12,12

Here 12 is the mode whereas 8 refers to median and central tendency also.

Topic 230

Mean

The mean is the average value of some score or data.

It can be interpreted as an individual value we get after distributing the total score on an equal scale.

Topic 231

Calculating Mean

Data: 6,7,10,12,13,4,8,12

Mean =6+7=10+12+13+4+8+12/8

= 72/8

= 9

The mean or average is calculated by adding up the scores and dividing the total by the number of scores.

Topic 232

Calculating Mean from Frequency

Value	Frequency
2	4
5	3
8	2
11	3
12	2

For instance:

2*4+5*3+8*2+11*3+12*2/4+3+2+3+2

Mean=

Topic 233

Significance of Mean

It gives us a value that helps to understand an individual distribution if scores are divided in equal parts. For instance, in the case of result, mean score helps to imagine the position of each student if there is an equal distribution of marks. This is the reason that mean is sometimes discussed as probable score also.

Topic 234

Mode, Median, Mean

Mode is the most frequent score whereas median and central tendency refer to the middle score or value in some data.

Example

4,5,6,7,8,9,12,12,12

Here 12 is the mode whereas 8 refers to median. Mean will be calculated as:

4+5+6+7+12+12+12/9=

Topic 235

Mean and Percentage

These are closer to each other as both refer to probable value. Mean is equal distribution of score.

Whereas percentage refers to value with reference to 100, which is a probable value.

Topic 236

Standard Deviation

A quantity expressing how much the members of a group differ from the mean value for the group. It can be interpreted as an individual value compared with the mean.

Topic 237

Calculating standard Deviation

There are different steps involved in calculating standard deviation. First of all calculate mean of the given score.

For instance:

10,24,24,20,30,36

Mean= 10+24+24+20+30+36/n

n=6

=24

Topic 238

Difference between each score and Mean

Mean = 24

Subtract mean from each number.

10-24= -14

24-24= 0

20-24= -4

30-24= 6

36-24= 12

Get the square value of each difference

14*-14=196

-4*-4=16

6*6= 36

Topic 239

Calculating Variance

Next step is to sum all of the square values and then divide it by total number of scores. This is known as the variance.

Get the square value of each difference

196+0+0+16+36+144=392/6=65.33

Topic 240

Square root of variance

Next step is to take square root of variance. This value is known as standard deviation.

Square root of 65.33 = 8.082

Topic 241

Significance of Standard Deviation

It gives us a value that helps to understand an individual difference if scores are divided in equal parts. It tells us about the difference between the higher and lower side of result. The lower value of standard deviation refers to a balanced result.

Topic 242

Interpretation of Statistical Values

Mode

The mode is the value which appears the most often in the data. It is possible to have more than one mode if there is more than one value which appears more than others. It reflects the ability of those securing that figure. It means they are able to stand on this particular point. Others can also be viewed in this light.

Topic 243

Interpretation (Median)

Median is interpreted as the central value. So it tells about the central position of the result. Median helps view the position of those being left and right.

Topic 245

Interpretation (range)

The range is the difference between the lowest value from the highest value.

Topic 246

Interpretation (Mean)

It helps us to know the average distribution of data. It is interpreted as the average position of each individual. Though it is a probable value, but it is interpreted and discussed with other probabilities.

Topic 247

Interpretation (standard Deviation)

It is interpreted as the difference of each score with reference to mean. This is way it helps to assess a value of each score.

Topic 248

Displaying Data

Tally marks also called hash marks show numeral system. They are a form of numerical used for counting. They are most useful in counting. These are used in different areas including assessment and research. We should have a set of data which can be stored in tallies. It is represented by a small line.

Topic 249

Representation

We use these lines to store data. You can see that tallies do not carry numbers, but serve as numbers for counting etc.

Topic 250

Tables

The simplest style for displaying data is tables. There are different types of tables.

This way tables help us a lot, from simple of difficult areas.

Topic 251

Graphs

A diagram showing the relation between variable quantities, typically of two variables. each measured along one of a pair of axes at right angles.

Topic 252

Some Principles

There are certain principles of displaying data. For instance, we must keep in mind:

- A relationship tries to show a connection or correlation.
- A comparison tries to set one set of variables a part from another.
- A composition tries to collect different types of information.
- A distribution tries to lay out a collection of related or unrelated.

Topic 253

Some Recommendations

Sorting and re-grouping data.

Transforming raw data into indicators such as percentages, rates and ratios.

Presenting the data and indicators in tables, charts and texts which enable easy analysis, interpretation and use.

Topic 254

Types of Graphs

Line Graphs

Comparing various sets of data can be complicated, but line graphs make it easy. The plotted peaks and dips on the grid allow you to monitor and compare improvement and decline. Line graphs are most often used by scientists, professionals and students.

Topic 255

Bar Graphs

Bar Graphs compare data in a simple format consisting of rectangular bars.

With a few varieties to choose from, settling on the right bar graph might be confusing.

Should you go with a horizontal, vertical, double or group bar graph?

Topic 256

Histograms

Almost similar to Bar graph, a histogram is a graphical representation of the distribution of data.

It is an estimate of the probability distribution of a continuous variable.

Topic 257

Dot Graph

A dot plot is a two- dimensional graphical display. One axis of the dot plot (usually the horizontal) is a scale covering the range of quantitative values to be plotted. The other axis, usually vertical, shows descriptive labels for the data shown there.

Topic 258

Box Graph

A box and whisker plot is a diagram showing statistical distribution of a data set. This plot makes it easy to see how the data is distributed along a number line. It shows five-number summaries:

the smallest observation (sample minimum), lower quartile (Q1), median (Q2), upper (quartile (Q3), and largest observation (sample maximum).

Topic 259

Pie Graphs

Simple to make and simple to understand, a pie chart is a popular form of data comparison, consisting of a circle that is split into parts. They are used to represent categorical data or values of variables.

They are basically circles that are divided into segments or categories.

Percentages are used to compare the segments, with the whole being equal to 100%.

Topic 260

Developing a Test

Test Blueprint

The test blueprint (or test specifications) identifies the objectives and skills which are to be tested and the relative weight on the test given to each. This statement necessarily precedes any development of the test.

These specifications provide a "blueprint" for test construction. In absence of such a blueprint, test development can potentially proceed with little clear direction.

Topic 261

Item Development

The term item is used as a shorthand for questions on the test. Item development can proceed only when a clearly agreed upon set of objectives is available.

It is advised that an item should measure only a single objective.

Each objective, however, should be measured by one or several items, depending on the test specifications.

Topic 262

Item Format

The format of the item necessarily proceeds from the test blueprint. The blueprint indicates the kinds of skills and the balance of test content to be measured. The selection of item types and test

format should be based on the kinds of skills to be measured and not on some personal like or dislike for a particular item format.

Topic 263

Objective Questions

- Write with clear terminology.
- Clear statement.
- Avoid confusions.
- Keep each item separate.
- If more options than one are correct, ask for the best answer.

- Complete requirement.
- Correct grammar.
- None of the above' should not be used as options.
- Bring variety.

Topic 264

Essay Test Items

Essay items are useful when examinees have to show how they arrived at an answer.

A test of writing ability is a good example of the kind of test that should be given in an essay response format.

This type of item, however, is difficult to score reliably and can require a significant amount of time to be graded.

Grading is often affected by the verbal fluency in the answer, handwriting, presence or lack of spelling errors, grammar used and the subjective judgments of the grader.

Topic 265

Marking Scheme

Marking scheme should be clear and relevant.

For instance:

Q. What is assessment? (10)

And compare this question:

Q. a. Define assessment. (2)

b. Discuss the role of assessment in a classroom. (8)

Topic 266

Outcomes of Assessment

Assessment is related to the targets of learners and tests them about these targets. This way, it helps to mark the position of some learner.

Assessment approaches promote learner engagement and encourage learners to become more independent in their learning.

Topic 267

Learner's Skills

Assessment promotes learner engagement and encourages learners to improve their skills.

Speaking, writing, listening, thinking all refer to different skills. Assessment helps learners to improve their skills.

Topic 268

Learner's Knowledge

We enhance our knowledge with the help of assessment.

Different materials and techniques polish our capabilities.

It helps those also to improve their knowledge who considers assessment as a pressure.

Topic 269

Guiding Teaching

Assessment guides teachers as well about their teaching materials and techniques.

If learners have a picture about learning quality, teachers can also have an idea how they have performed as teachers.

Topic 270

Involving Many Parties

Assessment involves many parties directly and indirectly. For instance your teacher is a direct party. Your principal also might be taken as a direct party.

But those sitting in the finance office or publishing your question papers are the example of indirect parties.

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